

ABSTRACT OF THE DISCLOSURE

A system and method for maintaining the upset rate of microcircuits within acceptable limits, while optimizing performance and, optionally, not increasing power consumption. The system comprises a variable power supply, which supplies power to the microcircuit; a controller which provides an instructions to the variable power supply to vary voltage depending on susceptibility to upsets; and an actuator for sending an actuating signal to the controller. The system can include a variable frequency clock for varying the clock rate of the microcircuit and the controller can send instructions to vary the clock rate in order to keep power consumption constant.